IN THE CLEAN SET OF CLAIMS:

A.   Please replace Claims 34, 35, 36, 37 and 38 as follows:

34. (Twice Amended) A frame structure for a communication system, each frame having 15 slots and each slot having N number of pilot bits, where $2 \leq N \leq 16$, such that there are N number of pilot bit patterns of 15 bits in the frame, wherein the improvement comprises N number of pilot bit patterns having at least one of the following pilot bit patterns:

Slot No	1 2 3 4...............................15
Pilot bit pattern 1 =	(1 0 0 0 1 1 1 1 0 1 0 1 1 0 0)
Pilot bit pattern 2 =	(1 0 1 0 0 1 1 0 1 1 1 0 0 0 0)
Pilot bit pattern 3 =	(1 1 0 0 0 1 0 0 1 1 0 1 0 1 1)
Pilot bit pattern 4 =	(0 0 1 0 1 0 0 0 0 1 1 1 0 1 1)
Pilot bit pattern 5 =	(1 1 1 0 1 0 1 1 0 0 1 0 0 0 1)
Pilot bit pattern 6 =	(1 1 0 1 1 1 0 0 0 0 1 0 1 0 0)
Pilot bit pattern 7 =	(1 0 0 1 1 0 1 0 1 1 1 1 0 0 0)
Pilot bit pattern 8 =	(0 0 0 0 1 1 1 0 1 1 0 0 1 0 1)

wherein pilot bit patterns are used in a communication system.

35. (Twice Amended) A frame structure for an uplink Dedicated Physical Control Channel (DPCCH) in a communication system, wherein the improvement comprises each frame of the uplink DPCCH having 15 slots and N_{pilot} number of pilot bits in each slot, where $3 \leq N_{pilot} \leq 8$ and pilot bit patterns comprise at least one of the following based on N_{pilot} number of pilot bits:

	when $N_{pilot} = 5$					when $N_{pilot} = 6$					
Bit #	0	1	2	3	4	0	1	2	3	4	5
Slot #0	1	1	1	1	0	1	1	1	1	1	0
1	0	0	1	1	0	1	0	0	1	1	0
2	0	1	1	0	1	1	0	1	1	0	1
3	0	0	1	0	0	1	0	0	1	0	1
4	1	0	1	0	1	1	1	0	1	0	0
5	1	1	1	1	0	1	1	1	1	0	0
6	1	1	1	0	0	1	1	0	1	0	0
7	1	0	1	0	0	1	1	1	1	1	0
8	0	1	1	1	0	1	0	1	1	1	1
9	1	1	1	1	1	1	1	1	1	0	1
10	0	1	1	0	1	1	0	1	1	0	0
11	1	0	1	1	1	1	1	0	1	0	0
12	1	0	1	0	0	1	1	0	1	1	0
13	0	0	1	1	1	1	0	0	1	1	1
14	0	0	1	1	1	1	0	0	1	1	1

	when $N_{pilot} = 7$							when $N_{pilot} = 8$							
Bit #	0	1	2	3	4	5	6	0	1	2	3	4	5	6	7
Slot #0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
1	1	0	0	1	1	0	1	1	0	1	0	1	1	1	0
2	1	0	1	1	0	1	1	1	0	1	1	0	1	1	1
3	1	0	0	1	0	1	1	1	0	1	0	0	1	1	1
4	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0
5	1	1	1	1	0	0	1	1	1	1	1	0	1	1	0
6	1	1	1	1	0	0	1	1	1	1	0	0	1	1	0
7	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0
8	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1
9	1	0	1	1	0	1	1	1	0	1	1	0	1	1	1
10	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0
11	1	1	0	1	0	0	1	1	1	1	0	0	1	1	0
12	1	0	0	1	1	1	1	1	0	1	0	1	1	1	1
13	1	0	0	1	1	1	1	1	0	1	0	1	1	1	1
14	1	0	0	1	1	1	1	1	0	1	0	1	1	1	1

wherein pilot bit patterns are used in a communication system.

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36. (Twice Amended) A frame structure for a Random Access Channel (RACH) in a communication system, wherein the improvement comprises each frame of the RACH having 15 slots and N_{pilot} number of pilot bits in each slot, where $N_{pilot}=8$, and pilot bit patterns comprise:

Bit #	$N_{pilot} = 8$							
	0	1	2	3	4	5	6	7
Slot #0	1	1	1	1	1	1	1	0
1	1	0	1	0	1	1	1	0
2	1	0	1	1	1	0	1	1
3	1	0	1	0	1	0	1	0
4	1	1	1	0	1	0	1	1
5	1	1	1	1	1	1	1	0
6	1	1	1	1	1	0	1	0
7	1	1	1	0	1	0	1	0
8	1	0	1	1	1	1	1	0
9	1	1	1	1	1	1	1	1
10	1	0	1	1	1	0	1	1
11	1	1	1	0	1	1	1	1
12	1	1	1	0	1	0	1	0
13	1	0	1	0	1	1	1	1
14	1	0	1	0	1	1	1	1

wherein pilot bit patterns are used in a communication system.

37. (Twice Amended) A frame structure for a downlink Dedicated Physical Control Channel (DPCCH) in a communication system, wherein the improvement comprises each frame of the downlink DPCCH having 15 slots and N_{pilot} number of pilot bits in each slot, where $2 \leq N_{pilot} \leq 16$, and pilot bit patterns comprise at least one of the following based on N_{pilot} number of pilot bits:

	when $N_{pilot}=2$	when $N_{pilot}=4$		when $N_{pilot}=8$				when $N_{pilot}=16$							
Symbol #	0	0	1	0	1	2	3	0	1	2	3	4	5	6	7
Slot #0	11	11	11	11	11	11	10	11	11	11	10	11	11	11	10
1	00	11	00	11	00	11	10	11	00	11	10	11	11	11	00
2	01	11	01	11	01	11	01	11	01	11	01	11	10	11	00
3	00	11	00	11	00	11	00	11	00	11	00	11	01	11	10
4	10	11	10	11	10	11	01	11	10	11	01	11	11	11	11
5	11	11	11	11	11	11	10	11	11	11	10	11	01	11	01
6	11	11	11	11	11	11	00	11	11	11	00	11	10	11	11
7	10	11	10	11	10	11	00	11	10	11	00	11	10	11	00
8	01	11	01	11	01	11	10	11	01	11	10	11	00	11	11
9	11	11	11	11	11	11	11	11	11	11	11	11	00	11	11
10	01	11	01	11	01	11	01	11	01	11	01	11	11	11	10
11	10	11	10	11	10	11	11	11	10	11	11	11	00	11	10
12	10	11	10	11	10	11	00	11	10	11	00	11	01	11	01
13	00	11	00	11	00	11	11	11	00	11	11	11	00	11	00
14	00	11	00	11	00	11	11	11	00	11	11	11	10	11	01

wherein pilot bit patterns are used in a communication system.

38. (Twice Amended) A frame structure for a downlink Dedicated Physical Control Channel (DPCCH) using Space Time Transmit Diversity (STTD) encoding in a communication system, wherein the improvement comprises each frame of the downlink DPCCH having 15 slots and N_{pilot} number of pilot bits in each slot, where $2 \leq N_{pilot} \leq 16$, and pilot bit patterns comprise at least one of the following based on N_{pilot} number of pilot bits:

	when N_{pilot} = 4		when N_{pilot} = 8				when N_{pilot} = 16							
Symbol #	0	1	0	1	2	3	0	1	2	3	4	5	6	7
Slot #0	01	10	11	00	00	10	11	00	00	10	11	00	00	10
1	10	10	11	00	00	01	11	00	00	01	11	10	00	10
2	11	10	11	11	00	00	11	11	00	00	11	10	00	11
3	10	10	11	10	00	01	11	10	00	01	11	00	00	00
4	00	10	11	11	00	11	11	11	00	11	11	01	00	10
5	01	10	11	00	00	10	11	00	00	10	11	11	00	00
6	01	10	11	10	00	10	11	10	00	10	11	01	00	11
7	00	10	11	10	00	11	11	10	00	11	11	10	00	11
8	11	10	11	00	00	00	11	00	00	00	11	01	00	01
9	01	10	11	01	00	10	11	01	00	10	11	01	00	01
10	11	10	11	11	00	00	11	11	00	00	11	00	00	10
11	00	10	11	01	00	11	11	01	00	11	11	00	00	01
12	00	10	11	10	00	11	11	10	00	11	11	11	00	00
13	10	10	11	01	00	01	11	01	00	01	11	10	00	01
14	10	10	11	01	00	01	11	01	00	01	11	11	00	11

wherein pilot bit patterns are used in a communication system.